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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/535,233	03/24/2000	Masaya Kadono	SEL 171	1670
7590 09/01/2004		EXAMINER		
Cook Alex McFarron Manzo Cummings & Mehler Ltd			COLEMAN, WILLIAM D	
200 West Adam	s Street		ART UNIT	PAPER NUMBER

Suite 2850 Chicago, IL 60606

2823

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Advisory Action	09/535,233	KADONO ET AL.				
, and the same of	Examiner	Art Unit				
	W. David Coleman	2823				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
THE REPLY FILED 20 August 2004 FAILS TO PLACE. Therefore, further action by the applicant is required to a final rejection under 37 CFR 1.113 may only be either: (condition for allowance; (2) a timely filed Notice of Appelexamination (RCE) in compliance with 37 CFR 1.114.	void abandonment of this appliced in the same of this application in the same of the same	cation. A proper rep ch places the appli	ply to a cation in			
PERIOD FOR RE	PLY [check either a) or b)]					
a) The period for reply expires <u>3</u> months from the mailing date of						
b) The period for reply expires on: (1) the mailing date of this Advevent, however, will the statutory period for reply expire later the ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The dathave been filed is the date for purposes of determining the period of extensions of the state from: (1) the expiration date of the shortened (b) above, if checked. Any reply received by the Office later than three moteraned patent term adjustment. See 37 CFR 1.704(b).	an SIX MONTHS from the mailing date of FILED WITHIN TWO MONTHS OF THE te on which the petition under 37 CFR 1.1 sion and the corresponding amount of the I statutory period for reply originally set in	f the final rejection. E FINAL REJECTION. 36(a) and the appropriate exithe fee. The appropriate exithe final Office action; or	See MPEP e extension fee tension fee under (2) as set forth in			
1 A Notice of Appeal was filed on Appellant's 37 CFR 1.192(a), or any extension thereof (37 CF						
2. The proposed amendment(s) will not be entered be	ecause:					
(a) They raise new issues that would require further consideration and/or search (see NOTE below);						
(b) ☐ they raise the issue of new matter (see Note below);						
(c) they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or						
(d) they present additional claims without cancel	ing a corresponding number of	finally rejected clair	ms.			
NOTE:						
$3.\square$ Applicant's reply has overcome the following rejection	tion(s):					
4. Newly proposed or amended claim(s) would canceling the non-allowable claim(s).	be allowable if submitted in a s	eparate, timely file	d amendment			
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request fo application in condition for allowance because: see		sidered but does NO	OT place the			
6. The affidavit or exhibit will NOT be considered be raised by the Examiner in the final rejection.	cause it is not directed SOLELY	to issues which we	ere newly			
7. For purposes of Appeal, the proposed amendment explanation of how the new or amended claims we			and an			
The status of the claim(s) is (or will be) as follows:						
Claim(s) allowed:						
Claim(s) objected to:						
Claim(s) rejected: 11-30.						
Claim(s) withdrawn from consideration:						
8. \square The drawing correction filed on is a) \square app	roved or b) disapproved by	the Examiner.				
9. Note the attached Information Disclosure Stateme	nt(s)(PTO-1449) Paper No(s).					
10. Other:		Ex				
		W. David Coleman Primary Examiner Art Unit: 2823				

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DETAILED ACTION

Response to Amendment After Final or Advisory Action

1. Applicant's arguments filed August 20, 2004 have been fully considered but they are not persuasive.

- 2. Applicants contend that independent claim 11 recites forming a gate insulating film in contact with the semiconductor film from the surface of which the contaminating impurity has been removed and that this feature in Lin et al., U.S. Patent 6,123,865 in view of Muraoka et al., U.S. Patent 4,339,340 is not disclosed or vaguely disclosed.
- 3. In response to Applicants contention that Lin in view of Muraoka fails to teach the claimed limitation forming a gate insulating film in contact with the semiconductor film from the surface of which the contaminating impurity has been removed is disclosed in Lin (please note that Lin teaches etching films on semiconductor wafers for integrated circuits, column 1, lines 6-7. Then Lin discloses that wet etches are especially suitable for blanket etches of polysilicon, oxide, nitride and metal. Please note that these films are well known for forming semiconductor integrated circuits) Muraoka teaches surface treating a semiconductor device and specifically a MOS device (column 2, line 38), specifically a MOS capacitor. It is well known that the structure of the MOS capacitor has a gate insulating film and a gate as the top electrode, which has motivation being a semiconductor integrated circuit being processed.

Status of the Amendment After Final Rejection

4. Applicants response will be entered for the purposes of Appeal.

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Status of the pending claims After Final Rejection

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5. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al., U.S. Patent 6,123,865 in view of Muraoka et al., U.S. Patent 4,339,340.

- 6. Claims 13, 14, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al., U.S. Patent 6,123,865 in view of Muraoka et al, U.S. Patent 4,339,340 as applied to claims 11 and 14 above, and further in view of Araujo et al., U.S. Patent 5,578,103.
- 7. Claims 19, 20, 23, 24, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al., U.S. Patent 6,123,865 in view of Muraoka et al., U.S. Patent 4,339,340 and Yoshikawa et al., U.S. Patent 6,106,907.
- 8. Claims 21, 22, 25, 26, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al., U.S. Patent 6,123,865 in view of Muraoka et al, U.S. Patent 4,339,340 and Yoshikawa et al., U.S. Patent 6,106,907 in further view of Araujo et al., U.S. Patent 5,578,103.

Conclusion

- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. David Coleman whose telephone number is 571-272-1856. The examiner can normally be reached on 9:00 AM-5:00 PM.
- 10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 571-272-1855. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent 11.

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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W. David Coleman **Primary Examiner** Art Unit 2823

WDC